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REMARKS/ARGUMENTS

This paper is responsive to the Office Action dated May 19, 2004, having a shortened statutory period expiring on August 19, 2004, wherein:

Claims 1-14 and 17-85 were previously pending in the application;

Claims 1-5, 7-14, 17-22, 24-28, 30-34, 36-49, 51-59, 61-69, 71-79, and 81-85 were rejected; and

Claims 6, 23, 29, 35, 50, 60, 70 and 80 were objected to.

Claim 17 has been amended and no claims have been added or canceled by this amendment. Accordingly, claims 1-14 and 17-85 remain currently pending in the present application.

Information Disclosure Statement(s)

In the present Office action, the Examiner has again indicated that Information Disclosure Statements submitted by Applicants on July 19, 2001 and November 10, 2003 failed to provide a legible copy of each U.S. and foreign patent and each publication or that portion which caused it to be listed as required by 37 CFR §1.98(a)(2). Applicants respectfully disagree in part. 37 CFR §1.98(d) provides that:

A copy of any patent, publication, pending U.S. application or other information, as specified in paragraph (a) of this section, listed in an information disclosure statement is required to be provided, even if the patent, publication, pending U.S. application or other information was previously submitted to, or cited by, the Office in an earlier application, unless: (1) The earlier application is properly identified in the information disclosure statement and is relied on for an earlier effective filing date under 35 U.S.C. 120; and (2) The information disclosure statement submitted in the earlier application complies with paragraphs (a) through (c) of this section.

Applicants respectfully submit that, with the exception of the U.S. Patent Applications listed under the "Other Art" section of the Information Disclosure Statement submitted by Applicants on November 10, 2003, all references indicated in the above-identified Information Disclosure Statements comply with 37 C.F.R. §1.98(d). More specifically, Applicants submit that each of the references were previously submitted or cited in application serial numbers 09/232,395 and/or 09/477,166 as indicated in the

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Information Disclosure Statement of November 10, 2003 and that these applications are relied upon for an earlier effective filing date under 35 U.S.C. 120. Consequently, Applicants request that these references be considered and that the Examiner indicate his consideration using the previously supplied PTO Form-1449.

Formal Matters

In the present Office Action, the Examiner objected to Applicants' claims 6, 23, 29, 35, 50, 60, 70 and 80 as being dependent upon a rejected base claim but indicated that these claims would be otherwise allowable if rewritten in independent format including all of the limitations of their respective base claim(s) and any intervening claims. Although Applicants have not elected to amend or redraft claims 6, 23, 29, 35, 50, 60, 70 and 80 in independent form at the present time, Applicants reserve the right to do so in the future. Applicants wish to express their appreciation for the Examiner's indication of allowable subject matter with respect to Applicants' claims.

The Examiner further indicated that the dependency of Applicants' claim 17, as previously presented, failed to comply with 37 C.F.R. §1.126. Applicants have amended claim 17 herein in light of the Examiner's comment and respectfully submit that the claim is now in compliance.

Examiner's Response to Arguments

In the present Office Action, the Examiner has responded to the arguments of Applicants' Response to Non-Final Office Action filed March 5, 2004. Applicants appreciate the Examiner's consideration and respectfully traverse the Examiner's response as follows.

In paragraph 6 of the present Office Action, the Examiner has responded to Applicants' statement that U.S. Patent No. 5,357,249 issued to Azaren, et al. (hereinafter, "Azaren") fails to teach a method of communicating a data stream through a telecommunications system comprising, for each of a second plurality of words, "determining if said each of said second plurality of words should be included in the generation of a backplane parity value by determining if said each of said second

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plurality of words is said relock word" as claimed (Applicants' claim 1). More specifically, the Examiner has stated in the indicated paragraph that,

Applicant argues that Azaren fails to disclose determining if a second plurality of words should included in the generation of a backplane parity value by determining if the second plurality of words is the relock word. However Examiner respectfully disagrees with the argument because Azaren discloses that the OCON is able to output (generate) parity bit values only when it can acquire sync bit to determine the frame synchronizing and serializing (determining if a word is a relock word or synchronized word), col. 10 lines 15-25.

Applicants respectfully disagree.

As an initial matter, Applicants submit that the Examiner's above-quoted statement mischaracterizes both Applicants' claim(s) and prior argument. Applicants do not claim and have not argued merely the determination of whether a relock word exists within a second plurality of words or the determination of which of a second plurality of words is a relock word. Rather, as the location of a relock word within a plurality of words may be unknown, (e.g., following "rearranging" of the currently claimed embodiment) Applicants have claimed determining if each of a second plurality of words is a relock word and argued that the Examiner's cited references (e.g., *Azaren*) fail to teach such a determination.

Applicants further respectfully submit that *Azaren* fails to teach, "determining if said each of said second plurality of words is said relock word" both because no determination is made for each of a plurality of words and because, in using only the frame bits of a digital data signal in parallel format (rather than an entire serial optical signal), no determination is made with respect to the second plurality of words as interpreted by the Examiner. *Azaren* teaches that, "bit errors are not counted until frame synchronization is acquired" (*Azaren*, Column 5, Lines 45-46) and that,

Frame detection circuit 106 further accepts the frame bit from serial-to-parallel logic circuit 102 and determines the synchronization frame bits of the input data, and thus, monitors the established sync acquisition. Once the position of the sync bit is determined, the other frame bits will be known. From frame detection circuit 106, the parity bits are output to a parity error count circuit 120 and the channel ID bits are output to a channel ID detection circuit 122. As mentioned above, OCON ASIC 46 receives an external clock source such that the parallel data from deskew circuit 124 can be output at a clock rate equal to that generated by

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frequency divider circuit 110 but out of phase, thus, enabling the OCON to be combined with the data from other OCONs. (Azaren, Column 10, Lines 15-25, emphasis supplied)

Applicants submit that as *Azaren* teaches the identification of all other frame bits within input data once the position of one sync bit is determined, no determination need be made for each portion or bit of input data as to whether or not it is a frame or synchronization bit. Consequently, *Azaren* fails to teach a determination whether each of a second plurality of words is a relock word as claimed.

Azaren further teaches an output conditioner (OCON) which converts serial data to parallel data prior to the manipulation described by the Examiner (see Azaren, Column 1, Lines 61-62 and Column 9, Line 44 - Column 10, Line 21) and "serial optical signals" which anticipate Applicants' claimed "second plurality of words" according to the present Office Action. As data may not be simultaneously serial and parallel, and further as Azaren specifically teaches a digital data signal in parallel format and a serial optical signal which are distinct, Applicants submit that Azaren fails to teach, "determining if said each of said second plurality of words is said relock word" as claimed.

Rejection of Claims under 35 U.S.C. § 102

In the present Office Action, claims 1-5, 7-14, 18-22, 24-28, 30-34, 36-49, 51-59, 61-69, 71-79, and 81-85 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Azaren*. While not conceding that the Examiner's cited reference(s) qualify as prior art, but instead to expedite prosecution, Applicants have chosen to respectfully disagree and traverse the rejection as follows. Applicants reserve the right, for example, in a continuing application, to establish that one or more of the Examiner's cited references do not qualify as prior art as to an invention embodiment previously, currently, or subsequently claimed.

With regard to Applicants' claims 1, 17, 18, 24, 30, 37, 38, 52, 54, 56, 62, 64, 66, 72, 74, 82 and 84 the Examiner states within the present Office Action that *Azaren* discloses a method of communicating a data stream through a telecommunications system comprising:

Rearranging said data stream into a serial optical signals (second plurality of words), wherein said second plurality of words include a synchronization bit pattern (relock word), and...col. 6, lines 40-55...

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for each of said second plurality of words, determining if said each of said second plurality of words should be included in the generation of a backplane parity value by determining if said each of said second plurality of words is synchronizing or not (relock word). Col. 5 lines 45-46.

Applicants respectfully disagree, and submit that for at least the reasons provided in the "Examiner's Response to Arguments" section of the present response, *Azaren* fails to teach "determining if said each of said second plurality of words is said relock word" as required by Applicants' claim 1, and generally required by Applicants' claims 7, 18, 24, 30, 36, 46, 56, 66, and 76.

With regard to Applicants' claims 2, 19, 25, 31, 53, 73 and 83, the Examiner states within the present Office Action that *Azaren* teaches, "that for said each of said second plurality of words, ignoring said each of said second plurality of words, if said each of said second plurality of words is said relock word, and including said each of said second plurality of words in said parity calculation, otherwise (See col. 5 lines 30-50)."

Applicants respectfully disagree. While clearly teaching that, "bit errors are not counted <u>until</u> frame synchronization is acquired" (*Azaren*, Column 5, Lines 45-46, emphasis supplied), nothing within the cited portion of *Azaren* teaches the inclusion or exclusion of a synchronization frame bit in a parity calculation. By contrast, Applicants claim, "ignoring said each of said second plurality of words, if said each of said second plurality of words is said relock word," as there may be no way to know if a relock word will be corrupted by a switching operation (see Applicants' specification, Page 35, Lines 21-24). Consequently, a corrupted synchronization frame bit within the apparatus and method of *Azaren* could result in a corrupted parity calculation and further errors whereas corruption of a relock word within the invention embodiments claimed by Applicants would have no impact on the generated backplane parity value.

For at least the foregoing reasons, Applicants submit that Applicants' claims 1 and 2, as presented, are independently allowable over *Azaren* and request that the Examiner's current rejection(s) be withdrawn. Applicants' claims 7, 18, 24, 30, 36, 46, 56, 66, and 76 each contain one or more limitations substantially similar to those

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described with respect to Applicants' claim 1 and are therefore allowable for at least those reasons stated for the allowability of claim 1. All remaining claims, depending directly or indirectly from Applicants' claims 1, 7, 18, 24, 30, 36, 46, 56, 66, and 76 are similarly allowable over Azaren for at least the reasons stated herein.

CONCLUSION

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5097.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop AF, COMMISSIONER FOR PATENTS, P. O. Box 1450, Alexandria, VA 22313-1450, on July 19, 2004.

Attorney for Applicant(s)

Date of Signature

Respectfully submitted,

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